



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/803,414	03/09/2001	David M. Neal	T268.12-0040	4811
26285	7590	08/06/2004	EXAMINER	
KIRKPATRICK & LOCKHART LLP			GORDON, BRIAN R	
535 SMITHFIELD STREET			ART UNIT	
PITTSBURGH, PA 15222			PAPER NUMBER	

1743

DATE MAILED: 08/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/803,414	<b>Applicant(s)</b> NEAL ET AL.	
	<b>Examiner</b> Brian R. Gordon	<b>Art Unit</b> 1743	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 May 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26 and 28-38 is/are pending in the application.
- 4a) Of the above claim(s) 1-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 24-26 and 28 is/are rejected.
- 7) ☒ Claim(s) 29-38 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All   b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. This application contains claims 1-23 drawn to an invention nonelected without traverse in Paper filed October 27, 2003. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

### ***Specification***

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### ***Claim Interpretation***

2. Claim 24 is interpreted by the examiner as requiring an exit port, a needle, a first flow path connected to the needle, a valve that can be open and closed connected to the flow path, the flow path connected to a gas source when the valve is closed. The "whereby" clause of the claim merely provides functional intended use of the device.

It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 1743

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 24-26, 28 are rejected under 35 U.S.C. 102(e) as being anticipated by Lewis et al. US 6,544,799.

Lewis et al. disclose a modular vial autosampler has **a storage area** for vials containing samples to be analyzed and at least one modular sampling station. **A vial transfer mechanism** includes an arm having a gripper that lifts a sample vial from the storage section, and the arm moves it to a station for identification and then to a sampling station, and under central control activates **the sampling station for obtaining a sample for analysis**. The vial transfer mechanism gripper is movable in X, Y, and Z directions to capture and move a selected vial and includes an alignment guide for the vials. Potentiometers are used for providing signals indicating arm position and the control is provided with updated information for calibration of the potentiometers and also updated position information for the arm relative to a fixed home position is obtained.

Vial storage area 14 includes a fixed or stationary platform shaped to receive removable vial racks 30a, 30b, which vial racks are preferably substantially identical. Specimen-containing vials can be loaded into pockets or receptacles 31 of racks 30a, 30b at a separate location and kept in storage until needed. Preferably, the skirts of

racks 30a, 30b slide down over **thermal blocks 48a, 48b (one for each rack)** which are fixedly mounted to vial storage platform area 14.

A vial can be transported by vial transporter 28 from the equilibration area 16 or directly from the vial storage area 14 to one of the sampling stations 20 or 22 where sampling operations are performed. At each of the sampling stations, a fluid is extracted from the vial. At sampling station 20, a liquid sample from a liquid specimen is extracted from the vial for subsequent sparging to remove volatiles from the liquid sample. At sampling station 22, a sample in the form of a gas or vapor is extracted from the vial during a sparging operation, preferably after injecting a liquid into the vial to contact a liquid or solid (e.g. **soil**) specimen, stirring the resulting mixture, and heating the mixture.

Vial transporter 28 loads and unloads a vial into vial holder 82 at the lowest position. As the elevator raises the vial, a needle assembly 92 punctures the vial septum. Sampling of the vial contents occurs at the highest position, where the needle assembly 92 fully penetrates the vial. Needle assembly 92, well known in the art, has an inner needle with a port at its lower tip and an outer needle having a port higher up at point 94. At the highest position of the vial, the port at 94 remains above the level of the liquid specimen in the vial while the tip of the inner needle is submerged in the liquid specimen. The inner needle communicates with fitting 96, and the outer needle communicates with fitting 98. In operation, a volume of the liquid specimen is drawn through the center needle and conveyed via fitting 96 to a sparger unit 100 (see FIGS. 1 and 10) on base unit 12 or to an external sparger unit.

A series of sequentially controlled valves, coupled with a syringe type pump provides for the analysis of samples removed from the vials placed in the sampling station.

It is important to note that the system permits backflushing the needles with a water or liquid to remove previous sample traces, utilizing the cup type vial holders to collect the backwash liquid and drain it as previously discussed and shown. A multi port chromatograph valve is utilized to permit selectively adding a known volume of two different **standards** into the test sample.

FIG. 7 schematically illustrates one arrangement used for sampling liquid or water samples in the station 20. On-off valves C and D control a source of helium 233. Port valve P5 is operated to connect four different ports in response to control signals.

As in the figuration seen figure 7 the needle flow path is in communication with the gas source via valves L and C (cut off from exit port "to concentrator"). The multiport valve may be rotated to a different position where the flow path is in communication with the exit port. As to the intended use of gas extraction the needle capable of extracting gas from the vessel as well.

### ***Response to Arguments***

5. Applicant's arguments filed May 3, 2004 have been fully considered but they are not persuasive. Applicant asserts that that Lewis does not disclose, at least, "a first valve having an open position wherein the first flow path is in line with the exit port . . . whereby a headspace gas extraction of the vial is facilitated by the valve being in the open position. . . .as recited in claim 24.

As recited above Lewis does comprise a multiport valve that allows for the arrangement claimed by applicant and the while the whereby clause is considered a functional intended use clause the examiner asserts that the device is structurally capable of extracting gas from a container.

For reasons given herein above the previous 102 rejection as based upon Lewis is hereby maintained.

***Allowable Subject Matter***

6. Claims 29-38 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record does not teach nor fairly suggest the needle comprises: a bottom stage having at least one aperture and an end; a middle stage, proximate to the bottom stage, having at least one aperture; and a top stage, proximate to the bottom and middle stages, having at least one aperture, wherein the top stage of the needle is in line with the first flow path and a needle further including a heated block adapted to heat a portion of at least one of the bottom stage, the middle stage, and the top stage of the needle.

***Conclusion***


8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian R. Gordon whose telephone number is 571-272-1258. The examiner can normally be reached on M-F, with 2nd and 4th F off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Jill Warden  
Supervisory Patent Examiner  
Technology Center 1700



Application/Control Number: 09/803,414

Page 8

Art Unit: 1743

brg